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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicant: Farrant et al.

Attorney Docket No: 22.1458

Serial No:

Art Unit:

Filed:

Examiner:

For: COMMUNICATING WITH A TOOL

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This application is a continuation of Application 09/179,507 filed 10/27/1998. An Information Disclosure Statement and copies of the references cited in the Statement were filed in the '507 Application.

In accordance with 37 CFR 1.98(d), copies of any patent, publication, or other information listed in an information disclosure statement are not required to be provided if they were previously submitted to the Office in a prior application provided the prior application is properly identified in the statement and relied on for an earlier filing date.

Therefore, please refer to the '507 Application file for copies of the references in this application.

Respectfully submitted,


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				Application Number	
				Filing Date	
				First Named Inventor Farrant et al.	
				Group Art Unit	
				Examiner Name	
Sheet 1 of 5				Attorney Docket Number 22.1458	

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ²			
	1	3,181,463		Morgan et al.	3/17/61	
	2	3,327,791		Harrigan, Jr.	12/22/64	
	3	3,366,055		Hollander, Jr.	11/15/66	
	4	3,517,758		Schuster	9/23/68	
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		Office ³	Number ⁴	Kind Code ⁵				
	21		WO 96/23195		Shann	8/1/96		
	22		WO 98/38470		Rospek	9/3/98		
	23		EP 0 029 671		Stonestrom	9/21/83		
	24		EP 0 601 880 A2		Barker et al.	6/15/94		
	25		EP 0 604 694 A1		Cabezas et al.	7/6/94		
	26		GB 693,164		Gulf Research & Development	6/24/53		
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	28		GB 2,100,395 B		Coley et al.	8/1/84		
	29		GB 2,118,282 A		Barrett	10/26/83		

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	30	4,662,281		Wilhelm et al.	5/5/87	
	31	4,700,629		Benson et al.	10/20/87	
	32	4,708,060		Bickes, Jr. et al.	11/24/87	
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		Office ³	Number ⁴	Kind Code ⁵				
	51		GB 2,190,730 A		Patz et al.	11/25/87		
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	53		GB 2,265,209 A		Hackney et al.	9/22/93		
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Examiner Initials*	Cite No. [†]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	57	"Performance Criteria for Small Slapper Detonators" Controller, Her Majesty's Stationery Office, London 1984	
	58	"New Developments in the Field of Firing Techniques" by K. Ziegler Propellants, Explosives, Pyrotechnics 12, 115-120 (1987)	
	59	"Application of Slapper Detonator Technology to the Design of Special Detonation Systems," by W. H. Meyers Proc. 12 th Symposium on Explosives and Pyrotechnics, San Diego, California, March 13-15, 1984, Detonation Systems Development, Los Alamos National Laboratory, pp. 4-5 through 4-19.	
	60	"CP DDT Detonators: II. Output Characterization," by M. L. Lieberman Sandia National Laboratories Report SAND 83-1893, Albuquerque, New Mexico, pp. 3-105 through 3-112.	
	61	"A Fast, Low Resistance Switch for Small Slapper Detonators," by D. D. Richardson and D. A. Jones Department of Defense Materials Research Laboratories Report MRL-R-1030, Victoria, Australia.	
	62	"The Effect of Switch Resistance on the Ringdown of a Slapper Detonator Fireset," by D. D. Richardson Department of Defense Materials Research Laboratories Report MRL-R-1004, Victoria, Australia.	
	63	"Flyer Plate Motion and Its Deformation During Flight," by H. S. Yadav and N. K. Gupta Int. J. Impact Engng. Vol. 7, No. 1, 1988, pp. 71-83.	
	64	"Mossbauer Study of Shock-Induced Effects in the Ordered Alloy Fe ₃₀ Ni ₇₀ In Meteorites," By R. B. Scorzelli, I. S. Azevedo, J. Danon and Marc A. Meyers J. Phys. F: Met. Phys. 17 (1987), pp. 1993-1997.	
	65	"Effect of Shock-Stress Duration on the Residual Structure and Hardness of Nickel, Chromel, and Inconel," by L. E. Murr and Jong-Yuh Huang Materials Science and Engineering, 19 (1975), pp. 115-122.	
	66	"Critical Energy Criterion for the Shock Initiation of Explosives by Projectile Impact, by H. R. James Propellants, Explosives, Pyrotechnics 13, (1988), pp. 35-41.	
	67	"High-Temperature-Stable Detonators," by R. H. Dinagar Proc. 12 th Symposium on Explosives and Pyrotechnics, San Diego, California, March 13-15, 1984, Los Alamos National Laboratory, pp. 4-1 through 4-4.	

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	68	"Shock Initiation of PETN," by J. C. Cheng Monsanto Research Corporation, Miamisburg, Ohio, pp. 1-31 through 1-35.			
	69	"Exploding Metallic Foils for Slapper, Fuse, and Hot Plasma Applications: Computational Predictions, Experimental Observations," by I. R. Lindemuth, J. H. Brownell, A. E. Greene, G. H. Nickel, T. A. Oliphant and D. L. Weiss, Thermonuclear Applications Group, Applied Theoretical Physics Division, and W. F. Hemsing and I. A. Garcia, Detonation Systems Group, Dynamic Testing Division, Los Alamos National Laboratory, Los Alamos, New Mexico, pp. 299-305.			
	70	"A New Kind of Detonator - The Slapper," by J. R. Stroud Lawrence Livermore Laboratory, University of California, Livermore, California, pp. 22-1 through 22-6.			
	71	"Pyrotechnic Ignition in Minislapper Devices," by D. Grief and D. Powell Awre, Aldermaston, Reading RG7 4PR, Berkshire, England, Controllor, HMSO, London, 1981, pp. 43-1 through 43-10.			
	72	"Exploding Foils - The Production of Plane Shock Waves and the Acceleration of Thin Plates," by D. V. Keller & J. R. Penning, Jr. The Boeing Company, Seattle, Washington, pp. 263-277.			
	73	"Acceleration of Thin Plates by Exploding Foil Techniques," by A. H. Guenther, D. C. Wunsch and T. D. Soapes Pulse Power Laboratory, Physics Division, Research Directorate Air Force Special Weapons Center, Kirtland Air Force Base, New Mexico, pp. 279-298.			
	74	"A Low-Energy Flying Plate Detonator," by A. K. Jacobson Sandia National Laboratories Report, SAND 81-0487C, Albuquerque, New Mexico, 1981, pp. 49-1 through 49-20.			
	75	"Sequential Perforations in Boreholes," by H. Lechen ANTARES Datensysteme GmbH, January 1998.			
	76	"A Simple Method for Estimating Well Productivity," by J. E. Brooks. SPE European Formation Damage Conference, The Hague, The Netherlands, 2-3 June, 1997.			
	77	"Unique Features of SCBs," by P. D. Wilcox and "SCB Explosive Studies" by R. W. Bickes, Jr. Initiating and Pyrotechnic Components Division 2515			
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